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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/335,742	06/18/99	AUDOUSSET M	05725.0429-0

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EXAMINER	
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ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/335,742	Applic(s) Audousset
	Examiner Caroline D. Liott	Group Art Unit 1751

☐ Responsive to communication(s) filed on _____ .

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-56 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-56 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Bracketing or underlining are commonly used to indicate amendments or changes in the claims as provided in 37 CFR 1.121(a)(2)(ii) and are normally not intended to be printed in the published patent. If underlining and/or bracketing is intended to appear in the claims in the published patent, see e.g. claim 1, Applicant should not use underlining and/or bracketing to indicate any avoid future amendments to the claims in order to avoid confusion during printing.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-27, 30-34 and 37-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henkel in view of Tsujino.

Henkel, WO 92/13824, teaches compounds of formula (I) as developer compounds for the production of oxidation hair colorants, see Abstract. Henkel's preferred developers of formula (I) include the claimed 1,8-bis(2,5-diaminophenoxy)-3,6-dioxaoctane first oxidation base and acid addition salts thereof (e.g. tetrahydrochloride), see Example 1.1. Henkel teaches that very brilliant and uniform hair colors may be obtained with good color fastness properties when the developers of formula (I) are mixed with suitable couplers, see Abstract. Henkel exemplifies various compositions which contain the claimed first oxidation base in combination with a coupler as claimed, e.g. 1-naphthol and m-aminophenol, wherein the oxidation bases and couplers are present in the claimed amounts, see Examples 2.1-2.13. The compositions are aqueous and may

contain solvents and adjuvants as claimed in the claimed amounts, see page 4, line 29-page 5, line 16 and Example 2. Henkel teaches that the compositions may also contain other known primary intermediates in order to vary the nuances, as well as direct dyes as claimed, see page 4, lines 12-17. Henkel's exemplified compositions also contain aqueous ammonia as claimed, and the compositions may have pH's from about 6-10 as claimed, see page 5, last paragraph and Example 2. Henkel's teaching of acidic pH's suggests the addition of acidifying agents to the patentee's compositions. Henkel's exemplified compositions are mixed with a hydrogen peroxide oxidant, and are applied to hair as claimed, see Example 2. Henkel's processes may use other oxidants as claimed, see page 5, lines 22-28. Henkel does not teach second oxidation bases as specifically claimed. The patentee also does not appear to teach the specifically claimed uricase oxidants, oxidant pH's and additives, separate oxidant application step, and dyeing devices and kits.

Tsujino, U.S. Patent No. 4,961,925, teaches the use of dielectron reducing oxidases, including the claimed uricase, as oxidants for dyeing keratin fibers, see col. 1, lines 46-54 and col. 2, lines 37-40. Tsujino teaches that oxidases are an improvement over conventionally used hydrogen peroxide oxidants because they result in less damage to the skin and hair, see col. 1, lines 11-43. Tsujino teaches that conventional oxidation dyes include second oxidation bases as currently claimed (e.g. p-phenylenediamine), as well as couplers as claimed (e.g. 2-methyl-5-(2-hydroxyethylamino)-phenol), see col. 2, line 45-col. 3, line 3. Tsujino teaches that the dye- and

oxidant-containing compositions may be separately packaged in kits/devices as claimed, see col. 2, lines 41-44 and Examples 7-10.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a second oxidation base as claimed to Henkel's exemplified compositions in the claimed amounts, resulting in compositions and dyeing processes as claimed, because Henkel teaches that any conventional oxidation bases may be added to the compositions in order to obtain the desired hair colors and nuances, and Tsujino teaches that the claimed second oxidation bases are conventional in the hair dyeing art, absent a showing otherwise. It would have been obvious to those skilled in the art to use a uricase oxidant as claimed in Henkel's processes because Tsujino teaches that the use of oxidase enzymes in place of Henkel's exemplified hydrogen peroxide results in decreased damage to both the skin and hair. It would have been obvious to those skilled in the art to package Henkel's compositions in multi-compartment devices and kits as claimed because Henkel suggests such packages by teaching separate dye- and oxidant-containing compositions, and Tsujino teaches that such packages are conventional for the storage of two-part oxidative hair dyeing formulations.

The Office holds the position that the claimed oxidant additives and separate application steps are patentably indistinct from Henkel's teachings as modified by Tsujino because the same end results are obtained, i.e. the application of a dye, oxidant, and additives to the hair, absent a showing otherwise. Furthermore, optimization of parameters such as oxidant pH would have

been obvious to those skilled in the art in order to obtain the most effective dyeing results, absent a showing otherwise. See *In re Aller*, 105 USPQ 233; *In re Luck*, 177 USPQ 523, and *In re Boesch*, 205 USPQ 215.

Claims 1-7, 9-13, 15-38, 41-53 and 55-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andrillon in view of Henkel.

Andrillon, U.S. Patent No. 4,065,255, teaches compositions for dyeing hair which contain at least one coupler of the formula exemplified and "at least one" oxidation base, therefore suggesting oxidation base mixtures, see Abstract. The patentee teaches that such compositions are highly resistant to washing, weather and light, see col. 1, line 67-col. 2, line 18. The oxidation bases and couplers may be present in the claimed amounts at the claimed pH's, wherein acids and bases as claimed may be used to adjust the pH, see col. 4, lines 9-16 and 45-52. Andrillon teaches that organic solvents, including ethanol, may be added to the compositions in the claimed amounts, as well as direct dyes and cosmetic adjuvants as claimed, including antioxidants, sequestering agents and basifying agents, see col. 4, lines 17-50. The oxidant may comprise hydrogen peroxide or persulfates as claimed, and may be mixed with the dyeing composition before application or applied separately as claimed, see col. 4, lines 40-42 and col. 4, line 56-col. 5, line 16. Particularly note Example 4 wherein Andrillon exemplifies a composition which contains the second oxidation base p-phenylenediamine and the coupler 2-methyl-5-N-β-hydroxyethylamino phenol as claimed, which composition is mixed with a hydrogen peroxide

oxidant and is applied to hair as claimed. Andrillon does not teach the claimed first oxidation base 1,8-bis(2,5-diaminophenoxy)-3,6-dioxaoctane. The patentee also does not specifically teach the claimed oxidant additives and pH's, the specific additives of claims 28-29, or the claimed kits and devices.

Henkel is relied upon as set forth above as teaching that the claimed 1,8-bis(2,5-diaminophenoxy)-3,6-dioxaoctane is a preferred oxidation base for use in hair dyeing compositions which contain suitable couplers because very brilliant and uniform hair colors may be obtained with good color fastness properties. Note that Henkel teaches that aminophenols are suitable couplers, see Abstract. Henkel is also relied upon above as teaching that the patentee's oxidation bases and couplers may be combined with conventional oxidation bases.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the claimed 1,8-bis(2,5-diaminophenoxy)-3,6-dioxaoctane oxidation base to Andrillon's compositions, such as the composition of Example 4, wherein the compositions are applied to hair in combination with oxidants as claimed in dyeing processes as claimed, because Andrillon suggests that mixtures of oxidation bases may be used in the patentee's compositions and processes, and Henkel teaches that this claimed oxidation base may be combined with Andrillon's m-aminophenol couplers and additional oxidation bases. Furthermore, Henkel specifically teaches that the claimed first oxidation base results in dyeings with good fastness

properties, a result specifically desired by Andrillon, further motivating those skilled in the art to select Henkel's oxidation base for use in Andrillon's compositions and processes.

It would have been obvious to those skilled in the art to add the claimed adjuvants to Andrillon's compositions as modified by Henkel because Andrillon teaches such additives as appropriate for the patentee's compositions (e.g. acids, solvents, etc). Furthermore, the Office holds the position that the selection of conventionally used adjuvants such as antioxidants and sequesterants would have been obvious to those skilled in the art in order to obtain the most effective hair dyeing compositions. Andrillon's teaching of separate dye- and oxidant-containing compositions suggests their storage in conventional multi-part devices and kits as claimed.

The Office holds the position that the claimed oxidant additives patentably indistinct from Andrillon's teachings as modified by Henkel because the same end results are obtained, i.e. the application of a dye, oxidant, and additives to the hair, absent a showing otherwise. Furthermore, optimization of parameters such as oxidant pH would have been obvious to those skilled in the art in order to obtain the most effective dyeing results, absent a showing otherwise. See *In re Aller*, 105 USPQ 233; *In re Luck*, 177 USPQ 523, and *In re Boesch*, 205 USPQ 215.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant is reminded that if any evidence is to be presented in accordance with 37 CFR 1.131 or 1.132, such evidence should be presented before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caroline Liott whose telephone number is (703) 305-3703. The examiner can normally be reached on Mondays-Thursdays from 8:30am to 6:00pm, and on alternate Fridays.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Yogendra Gupta, can be reached at (703)308-4708. All before final official faxes should be sent to (703) 305-7718. All after final official faxes should be sent to (703) 305-3599. All non-official faxes should be sent to (703) 305-6078.

Any inquiry of a general nature should be directed to the Group receptionist whose telephone number is (703) 308-0661.

C.D.L.
July 26, 2000

CAROLINE D. LIOTT
PRIMARY EXAMINER